

**Congress of the United States**  
**House of Representatives**  
Washington, DC 20515-4402

February 6, 2007

Mr. James Tegnalia, Director  
Defense Threat Reduction Agency  
8725 John Kingman Road Stop 6201  
Ft. Belvoir, VA 22060-6201

Dear Mr. Tegnalia,

Please include the comments contained within this letter as part of the record for the Draft Revised Environmental Assessment (EA) for Divine Strake. Your efforts to answer questions posed by myself and members of the Utah Congressional delegation are appreciated, but many important considerations remain unresolved. The Defense Threat Reduction Agency (DTRA) has been largely the cause of a great deal of anxiety and confusion throughout the western United States and particularly in Utah.

From the moment when I first learned about the proposal to detonate 700 tons of Ammonium Nitrate Fuel Oil (ANFO) at the Nevada Test Site as part of a budget line calling for nuclear and non-nuclear weapons effects research, I have been deeply concerned. I strongly support DTRA's efforts to conduct research into usable means to defeat Hard and Deeply Buried Targets. However, DTRA seems committed to pursuing a nuclear option that lacks Congressional support, would pose dangers to our troops and would lead to unacceptable health and safety risks for those living downwind of the NTS.

**1. Purpose and Need**

The stated Purpose and Need for Divine Strake (1.2) says that the desired results of the proposed project include: (1) improve the scientific understanding of weapons effectiveness versus collateral effects; (2) reduce geotechnical targeting uncertainties; (3) obtain a relevant full-scale database for code validations; and (4) provide test beds to develop improved weaponeering algorithms. Based on the information that you have provided directly to me and to my staff, nothing I have seen indicates how the detonation of 700 tons of stationary ANFO assists your agency in reducing targeting uncertainties. As I mentioned in my April 2006 letter to you, it is simply not possible to deliver (or target) a 700 ton weapon, because such a weapon is too large for all of the bombers in the U.S. fleet.

## **2. Alternative Locations**

The Divine Strake EA does not present alternative courses of action beyond the proposed action/no action scenarios. The National Environmental Policy Act of 1969 clearly requires that federal agencies must fully consider available options prior to a determination of course.

This glaring omission is particularly notable because the EA enumerates ten “related actions” – large-scale ANFO detonations ranging from 24 tons to 4,744 tons—all of which occurred at the White Sands Missile Range in New Mexico, not at the Nevada Test Site. Yet, in spite of the obvious precedent for conducting this experiment at White Sands, the EA does not even consider White Sands as an alternative. Instead, the EA dismisses alternative locations (2.4) with a scant paragraph that only says that other locations lack “specific geological properties.”

Given the level of concerns raised about the environmental and health effects of the proposed Divine Strake experiment, DTRA certainly should provide far more information regarding the geological differences between other locations and the U16b site (in a classified annex, if necessary). This information would be particularly important for the White Sands site as DTRA has previously told the Utah Congressional delegation that cost concerns, not geology, were the primary reason why the agency had decided against the New Mexico site.

## **3. Affected Environment**

904 nuclear weapons tests were conducted at the Nevada Test Site prior to the 1992 testing moratorium. While none of the atmospheric tests were conducted in Area 16, several nuclear tests did in fact send fallout in directions other than downwind. Radiation fallout maps listed in the May 1979 Defense Nuclear Agency report called the “Analysis of Radiation Exposure for Task Force Warrior Shot Smoky” show tests in the Operation PLUMBBOB Series with fallout heading southwest, west and north of ground zero (Shot Wilson, Shot Coulomb B, etc.). Therefore, the EA should acknowledge that soil in area 16 may indeed have radioactive fallout from previous atmospheric tests, in addition to the underground tests conducted at U16a (3.1).

## **4. Radiation**

The EA should clarify that the aerial surveys conducted by the National Nuclear Security Administration (NNSA)—Nevada Site Office (NSO)—provided data meant to represent the whole body dose rate from ground radiation to an individual standing at ground level. The aerial surveys conducted by NNSA do not in fact constitute subsurface radiation levels. It is also my understanding, based on information received by outside experts, that aerial surveys only pick up gamma radiation, not beta radiation.

Furthermore, the 26 soil samples taken by the NSO appear to only reflect data from a few inches below the surface (likely the distance a shovel would descend). NNSA—NSO should also measure core samples at the site, particularly under and near the proposed detonation location (expected crater). If this research has already been conducted, then it should be presented within the EA and NNSA should specify the depth at which the core samples were taken in the EA.



Finally, the EA indicates which radioisotope in the sample had the longest half-life and it should specify whether NNSA measured radiation at many depths/points within the core sample in order to determine exactly which isotopes are the sources of the radiation.

**5. National Ambient Air Quality Standards**

As you may know, the National Ambient Air Quality Standards governing particulate emissions, established by the Environmental Protection Agency in 1997, was 2.5 microns, not the 10 micron standard used by NNSA-NSO. Experts, including individuals who have commented as part of this EA, have said that smaller particles stay adrift in the air longer and may be more harmful to humans. Therefore, this EA should explain why the document uses a standard that omits data for smaller particles. I would further like to associate myself with other comments in response to this EA regarding the size of particulates studied by NNSA.

In closing, thank you for your consideration of these comments. Please feel free to contact me if you require any additional information.

Sincerely,



JIM MATHESON  
Member of Congress